

### **REMARKS**

Claims 1-15 and 24-27 were pending in the Application. Claim 1 is an independent claim and claims 2-9 depend therefrom. Claim 10 is an independent claim and claims 11-12 depend therefrom. Claim 13 is an independent claim and claims 14-15 depend therefrom. Claim 24 is an independent claim and claims 25-27 depend therefrom. Claims 16-23 and 28-40 were previously canceled. Claims 1, 10, 12 and 25-26 are currently amended. Claim 11 is currently canceled. Applicant respectfully requests reconsideration of the application in light of the above amendments and the following remarks.

#### **Rejections Under 35 U.S.C. §103(a) – Goldberg and Lehman (Claims 1-15)**

Claims 1-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Goldberg (U.S. Patent No. 6,874,062) in view of Lehman (U.S. Patent No. 6,658,437). The Applicant respectfully traverses the above-mentioned rejections for at least the following reasons.

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure, Rev. 6, Sep. 2007 (“MPEP”) states the following:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that “rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). Further, MPEP § 2143.01 states that “the mere fact that references can be combined or modified does not render the resultant combination obvious

unless the results would have been predictable to one of ordinary skill in the art” (citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007)). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

*See* MPEP at § 2142.

Regarding claim 1, Applicant respectfully submits that the proposed combination of references fails to teach, suggest, or disclose at least, for example, “wherein the first state comprises at least a portion of a memory address of the first memory block irrespective of a position of the first logic circuit,” as set forth in Applicant’s amended, independent claim 1.

The Applicant appreciates the Examiner’s acknowledgment that Goldberg fails to “explicitly disclose the details of having the first state include at least a portion of a memory address of the first memory block” (Office Action, Page 5, Lines 15-16) and Lehman merely discloses determining the address of a block based on bit position in the base group. (*See* Office Action, Page 19, Line 22; Page 20, Lines 1-3, 8-12 and 19-21). However, it appears from the arguments presented in Points 24-25 of the Office Action that the Examiner is arguing that the Examiner is broadly interpreting “the first state comprises” to mean “the bit position of the first state.” (*See* Office Action, Page 19, Line 22; Page 20, Lines 1-3, 8-12 and 19-21). The Applicant respectfully traverses the Examiner’s interpretation as being inconsistent with the Applicant’s claim language as defined in the Applicant’s specification as discussed in the Applicant’s non-final Office Action response; however, in order to advance prosecution in the application, the Applicant has amended independent claim 1 to clarify that “the first state comprises at least a portion of a memory address of the first memory block **irrespective of a position of the first logic circuit.**” Thus, Lehman’s teaching of “[t]he address block is determined **by the bit position** in the base group and by the position of the base group in the larger allocation array” clearly fails to disclose “wherein the first state comprises at least a

portion of a memory address of the first memory block **irrespective of a position of the first logic circuit**,” as recited in Applicant’s independent claim 1.

Nowhere in the combination of Goldberg and Lehman is there any disclosure of “wherein the first state comprises at least a portion of a memory address of the first memory block **irrespective of a position of the first logic circuit**,” as set forth in Applicant’s independent claim 1. The cited sections of Lehman in the Office Action (e.g., Col. 10, line 50-Col. 11, line 15; Col. 11, lines 38-46; Figure 7 and related text; Figure 9 and related text), all discuss assigning an address to a bit based on the position of the bit. A bit position being associated with an address is different than “wherein the first state comprises at least a portion of a memory address of the first memory block **irrespective of a position of the first logic circuit**.” Because the combination of Goldberg in view of Lehman fails to teach or suggest all the claim limitations, a rejection under 35 U.S.C. §103(a) cannot be maintained.

Regarding claim 10, Applicant respectfully submits that the proposed combination of references fails to teach, suggest, or disclose at least, for example, “wherein the first state of the first logic circuit comprises a number of available memory segments in the first memory block, said number of available memory segments corresponding to the first state of the second logic circuit,” as set forth in Applicant’s amended, independent claim 10.

The Applicant notes that it appears from the arguments presented in Points 27-29 of the Office Action that the Examiner is interpreting Lehman’s “bit string 1111 1100 0000 0011” to be Applicant’s “wherein the first state of the first logic circuit comprises a number of available memory segments in the first memory block.” (See Office Action, Page 24, Lines 11-15 and 20-22; Page 25, Lines 1-6). The Applicant respectfully traverses the Examiner’s interpretation as being inconsistent with the Applicant’s claim language as defined in the Applicant’s specification as discussed in the Applicant’s non-final Office Action response; however, in order to advance prosecution in the application, the Applicant has amended independent claim 1 to clarify that “the first state of the first logic circuit comprises a number of available memory

segments in the first memory block, **said number of available memory segments corresponding to the first state of the second logic circuit.**”

Nowhere in the combination of Goldberg and Lehman is there any disclosure of “wherein the first state of the first logic circuit comprises a number of available memory segments in the first memory block, **said number of available memory segments corresponding to the first state of the second logic circuit,**” as set forth in Applicant’s amended, independent claim 10. Rather, Lehman teaches looking at an entire bit map to count up the number “0” bits in the bit map. Further, the Applicant appreciates the Examiner’s recognition that “Goldberd [sic] does not expressly disclose the details of wherein the first state of the first logic circuit comprises information indicating a number of available memory segments in the first memory block.” (Office Action, Page 13, Line 20-22). Because the combination of Goldberg in view of Lehman fails to teach or suggest all the claim limitations, a rejection under 35 U.S.C. §103(a) cannot be maintained.

Regarding claim 13, Applicant respectfully submits that the proposed combination of references fails to teach, suggest, or disclose at least, for example, “wherein the second state of the first logic circuit comprises information indicating an offset to available memory,” as set forth in Applicant’s amended, independent claim 13.

The Response to Arguments section of the Office Action states that “[t]he combination of Goldberg and Lehman discloses ‘wherein the second state of the first logic circuit comprises information indicating an offset to available memory’ as Lehman discloses [‘pointer array 124 permit the data manager to determine immediately if it should look in a given allocation page for a given buddy segment size and **provide a place to start looking for a segment** of a particular size’ (Co. 9, lines 53-60) wherein ‘the pointer array 124 **might** point to a buddy segment that is available, but on other occasions **the pointer array might point to a segment that was recently allocated.** Hence the pointer array actually provides a hint to the location of a free buddy segment. Nevertheless, the pointer for a particular buddy size is guaranteed to be at least **a correct starting**

**point for a search** for that size buddy segment' (Col. 10, lines 1-10) (Figure 7 and related text)].” (Office Action, Page 25, Line 20 – Page 26, Line 7 (emphasis added)). The Applicant notes that Lehman’s disclosure of a pointer array pointing to **a starting point for a search** for available memory is different than “wherein the second state of the first logic circuit comprises information indicating **an offset to available memory**,” as recited in Applicant’s independent claim 13. Further, the Applicant appreciates the Examiner’s recognition that Goldberg “doesn’t expressly disclose the second state of the first logic circuit comprise information indicating an offset to available memory.” (Office Action, Page 16, Lines 14-15). Therefore, the combination of Goldberg and Lehman cannot disclose “wherein the second state of the first logic circuit comprises information indicating an **offset to available memory**.” Because the combination of Goldberg in view of Lehman fails to teach or suggest all the claim limitations, a rejection under 35 U.S.C. §103(a) cannot be maintained.

The Applicant respectfully submits that, based upon the above, the proposed combination of Goldberg in view of Lehman fails to teach or suggest by themselves or in combination all of the limitations of Applicant’s independent claims 1, 10 and 13, and that the rejections of claims 1, 10 and 13 under 35 U.S.C. §103(a) cannot be maintained. Therefore, Applicant respectfully requests that the rejections of claims 1, 10 and 13 under 35 U.S.C. §103(a), be withdrawn.

Because dependent claims 2-9, 11-12 and 14-15 depend, directly or indirectly, from independent claim 1, 10 or 13, and because claims 1, 10 and 13 are allowable over the proposed combination of references, the Applicant asserts that claims 2-9, 11-12 and 14-15 are also allowable over the proposed combination of references and that the rejections of dependent claims 2-9, 11-12 and 14-15 are now moot. The Applicant further submits that each of claims 2-9, 11-12 and 14-15 is independently allowable. Thus, the Applicant respectfully requests that the rejections of claims 1-15 under 35 U.S.C. §103(a), be withdrawn.

**Rejections Under 35 U.S.C. §102(b) and 103(a) – Goldberg and Lehman (Claims 24-27)**

Claim 24 was rejected under 35 U.S.C. §102(b) as being anticipated by Goldberg. Claims 25-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Goldberg in view of Lehman. The Applicant respectfully traverses the above-mentioned rejections for at least the following reasons.

Regarding claims 24-27, for reasons similar to those stated previously, the Applicant submits that such claims are allowable.

For example and without limitation, for reasons generally analogous to those stated previously with regard to claim 1, the Applicant submits that claim 25 is allowable over Goldberg, and over Goldberg in view of Lehman.

Also for example, for reasons generally analogous to those stated previously with regard to claim 10, the Applicant submits that claim 26 is allowable over Goldberg, and over Goldberg in view of Lehman.

Further for example, for reasons generally analogous to those stated previously with regard to claim 13, the Applicant submits that claim 27 is allowable over Goldberg, and over Goldberg in view of Lehman.

**Final Matters**

The Office Action makes various statements regarding former claims 1-15 and 24-27, 35 U.S.C. § 102(b), 35 U.S.C. § 103(a), the Goldberg reference, the Lehman reference, one of skill in the art, etc. that are now moot in view of the above-mentioned amendments and/or arguments. Thus, the Applicants will not address all of such statements at the present time. However, the Applicants expressly reserve the right to challenge such statements in the future should the need

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arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

Applicant reserves the right to argue additional reasons supporting the allowability of claims 1-15 and 24-27 should the need arise in the future.

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### **CONCLUSION**

Applicant respectfully submits that claims 1-15 and 24-27 are in condition for allowance, and requests that the application be passed to issue.

Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Please charge any required fees not paid herewith or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

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Respectfully submitted,

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